

provided.

Applicant would like to respectfully point out that the declaration as originally filed includes: 1) the inventor's street address which is 171, chemin de Fontanette, 2) that the inventor is a citizen of FRANCE, 3) the inventor lives in the town of Lumbin (which is in France), and 4) the ZIP code for Lumbin is 38660. Accordingly, Applicant has met the requirements of 37 C.F.R. 163 and is not required to submit a new oath.

Rejection of Claims 1-10 and 12 over Miller

In paragraph 3 of the Office Action, claims 1-10 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by Miller (U.S. Pat. No. 5,200,802). Applicant respectfully traverses this rejection.

Amended claim 1 explicitly recites that the contradoped first region directly contacts the conduction channel. Support for such a recitation may be found in Figure 3 and on page 3, lines 28-31 of Applicant's specification. In Figure 3, the source 3 has a contradoped portion 7 which directly contacts to the conduction channel 4. Advantageously, and as stated on page 3, lines 28 to 30 and page 4, line 1 of Applicant's specification, because the contradoped region 7 increases the bias of the source with respect to the reference of the substrate, the transistor effect in the conduction channel can no longer occur.

In contrast, Miller teaches placing a P+ type implant region 56 between a source contact 50 and a lightly doped region 48. Referring to Figs. 3 and 5 of Miller, placing the region 56 between the source contact 50 and lightly doped region 48 forms diodes 58 and 59. These two diodes prevent the formation of a conduction channel between the regions 44 and 50. As is well known in the art, if the lightly doped region was not present between the implant region 56 and the conduction channel, the diode 58 would not be formed and the cell would not remain non-conductive. Thus, Applicant respectfully asserts that Miller does not teach or suggest a method that includes contradoping a first region of the source, where the first region directly contacts the conduction channel.

Furthermore, in an effort to expedite the prosecution of this application, Applicant has

amended claim 1 to include the limitation that the step of contradoping includes a step of contradoping only the first region of the source of the transistor such that a second region of the source remains of the second doping type. The language added to claim 1 by this amendment was formerly found in claim 2 thus, it does not necessitate a new search. This amendment is made to overcome European Patent No. 0213983 to Miller (herein "Miller II") which was cited during prosecution of the parent application of this application.

Miller II does not teach or suggest contradoping only a first region of the source. As is clear from Figs. 2 and 3 of Miller II, both the source and the drain are contradoped in Miller II (see e.g., regions 26 and 28). Accordingly, claim 1 as now presented is patentable over all the art of record. As such, Applicant respectfully requests that the rejection of claim 1 under 35 U.S.C. §102(b) be withdrawn.

Amended claim 3 also explicitly recites that the conduction channel and a region of the source of the first transistor directly contact each other. In contrast, the P+ region and the conduction channel of Miller do not directly contact each other and, as detailed above, are separated by the lightly doped region 48. Accordingly, because Miller does not teach or suggest the conduction channel and a first region of the source of the first transistor directly contacting each other wherein the first region is contradoped so that the first region and the conduction channel are of the same doping type, claim 3 is patentable over Miller.

In addition, claim 3 has been amended to include the limitation that the drain is not contradoped. Support for this recitation may be found on page 3, lines 25-27. This recitation includes, in essence, at least a portion of the limitation formerly found in claim 2. As such, no new matter has been introduced and no additional searching is required due to this amendment. As detailed above, this limitation overcomes the Miller II reference. Thus, Applicant respectfully asserts that claim 3 is patentable over Miller II as well.

Claims 4 and 12 depend from claim 3 and are patentable for at least the same reasons.

Claim 5 has been amended to recite that the source includes a first region of the first doping type directly contacting the conduction channel, and that the first region is the only region that is contradoped. As detailed above, Miller does not teach or suggest a first region of a first doping type

directly contacting the conduction channel of the first doping type. Miller II does not teach or suggest contradoping only the first region. Accordingly, amended claim 5 is patentable over Miller and Miller II.

Claim 6 depends from claim 5 and is patentable for at least the same reasons.

Claim 7 has been amended to recite that the non-conductive means directly contact the conduction channel. Furthermore, claim 7 now includes the recitation that the non-conductive means are the only region that are contradoped. As detailed above, the recitations added to claim 7 present patentable differences between claim 7 and both Miller and Miller II. As such, Applicant respectfully asserts that claim 7 is now in condition for allowance.

Claims 8 and 9 depend from claim 7 and are patentable for at least the same reasons.

Claim 10 has been amended to include the recitation that the step of contradoping is limited to contradoping only a first region of the source which directly contacts the conduction channel to make the first transistor degenerate. The recitation that only contradoping only occur on the first region that directly contacts the conduction channel was formerly found in claim 11. As detailed above, claim 10 is now patentable over Miller and Miller II. Accordingly, Applicant respectfully requests that the rejection of claim 10 over Miller be withdrawn.

Claim 11 depends from claim 10 and is patentable for at least the same reasons.

Rejection of Claims 10 and 11 over Fortino

Claims 10 and 11 were rejected under 35 U.S.C. §102(b) as being anticipated by Fortino. Applicant respectfully traverses this rejection.

As detailed in an Office Action in the parent application of this application, Fortino forms and positions P+ regions 42 and 44 by implanting ions into and heating a P type substrate 10. As such, Fortino's regions 42 and 44 are not regions of a source and are not contradoped. Accordingly, because claim 10, as originally filed, requires at least these two limitations not taught by Fortino, the rejection of claims 10 and 11 under 35 U.S.C. §102(b) over Fortino should be withdrawn.

Conclusion

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to deposit account No. 23/2825.

Respectfully submitted,

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Attorney's Docket No.: S1022/8175

Dated: June 2, 1999

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